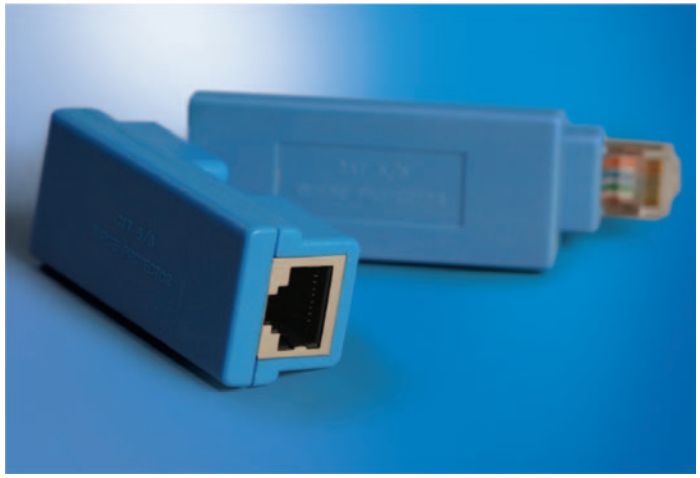
STC-PoE Series,

For Category 5 Power-over-Ethernet and Category 6 Applications



Features

- Exceeds CAT 5 & 6 Transmission Values
- CAT 5 PoE compatible
- CAT 6 compatible
- Applications up to 60 VDC @ 300 mA
- 3 Year Warranty

The Sola STD-PoE series is designed to work on Category 5 PoE transmission lines as well as Category 6 applications. They feature both female and to female and male to female RJ-45 connection options for ease of installation. The STD-PoE series is ideally suited to protect expensive equipment and critical communication/data transfer from internally generated transients and noise.

Power-over-Ethernet is a technology for wired Ethernet LANs (Local Area Networks) that allows the electrical current, necessary for the operation of each device, to be carried by the data cables rather than by power cords. This is minimizes the number of wires that must be strung in order to install the network. The result is lower cost, less downtime, easier maintenance, and greater installation flexibility than with traditional wiring.

Power-over-Ethernet (PoE) allows users to power devices over Ethernet cabling, it provides power and networking over a single cable. PoE have tremendous advantages in industrial applications, it permits users to power devices over the Ethernet cables. The ease of combining signal and power in a single Ethernet cable connection is contributing to the already rapid evolution of Ethernet based industrial control systems. Category 5e and Category 6 commonly known as Cat5e and Cat6 are the most widely used Ethernet connectivity method on the market today. Cat5e and Cat6 are defined in ANSI/TIA/EIA 568-B standard for Unshielded Twisted Pair Cabling.

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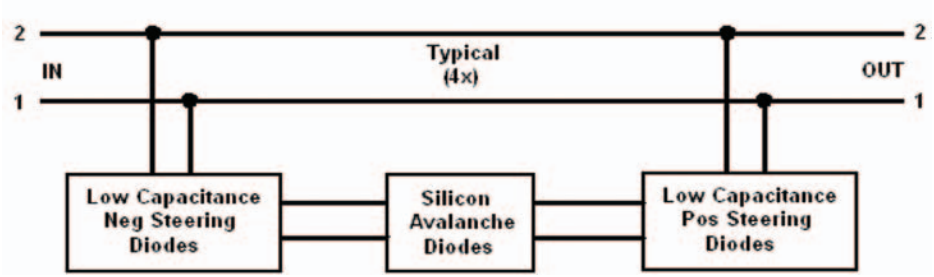
Theory of Operation

Surges in the positive direction are forced through the positive steering diodes, then clamped by the SADs, through the negative diodes and back to the source. Hence, negative surges are forced through the negative steering diodes and back to the source.



Specifications

Description	STC-PoE-65FF	STC-PoE-65MF
Mode of Protection	Normal Mode (L-L)	
	all lines (1-8) protected	
DC Breakover Voltage	65 VDC	
Insertion Loss	<.1 dB	
Certified Transmission Speeds	10baseT, 100baseT, 1000baseT	
Peak Surge Energy	300 watt	
Response Time	<1 ns	
Connectors	RJ-45 (Female - Female)	RJ-45 (Male - Female)
Dimensions	2.3 x 1.0 x .8 (in.)	3.0 x 1.0 x .8 (in.)

Certifications

Ethernet systems are closed systems. That is, there is no direct connection to either the public communication system or the electrical distribution network. This limits the magnitude and probability of high-energy transients, but does not decrease the probability of internally generated transients. The protection circuitry of the Sola STC-PoE Series provides protection between each conductor in a set, as well as each conductor set for signal circuits, and finally, each conductor set designed to carry DC power.

EMERSON
Industrial Automation

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Contact Technical Services at 1-800-377-4384 or tech@sola-hevi-duty.com with any questions.
Visit our website at www.solaheviduty.com